



ICC-ES Evaluation Report

Reissued April 2022

ESR-2599

This report is subject to renewal April 2024.

DIVISION: 10 00 00—SPECIALTIES
Section: 10 31 00—Manufactured Fireplaces

REPORT HOLDER:

FIRE ROCK PRODUCTS LLC

EVALUATION SUBJECT:

FIRE ROCK MODULAR REFRACTORY FIREPLACE AND CHIMNEY SYSTEMS: FIRE ROCK CONVENTIONAL FIREPLACE SERIES MODELS 30, 36, 42, AND 48; FIRE ROCK B-VENT FIREPLACE SERIES MODELS 30, 36, 42, AND 48; FIRE ROCK LITE-ROCK FIREPLACE SERIES MODELS 30, 36, 42 AND 48; FIRE ROCK VENT FREE FIREPLACE SERIES MODELS 30VF, 36VF, 42VF AND 48VF; OUTDOOR FIREPLACE SERIES MODELS 30, 36, AND 42; FIRE ROCK RUMFORD SERIES MODELS 30, 36, 42, AND 48 AND FIREROCK LINEAR FIREPLACE MODELS 60 AND 72.

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2018, 2015, 2012, 2009 and 2006 *International Building Code*® (IBC)
- 2018, 2015, 2012, 2009 and 2006 *International Residential Code*® (IRC)
- 2018, 2015, 2012, 2009 and 2006 *International Mechanical Code*® (IMC)
- 2018, 2015, 2012, 2009 and 2006 *International Fuel Gas Code*® (IFGC)
- 2013 *Abu Dhabi International Building Code* (ADIBC)[†]

[†]The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

Properties evaluated:

- Fire resistance
- Seismic Resistance

2.0 USES

The Fire Rock Modular Fireplace and Chimney Systems are wood- or gas-burning fireplaces that are constructed in the field using prefabricated blocks.

3.0 DESCRIPTION

3.1 Solid-Fuel Burning Fireplaces:

3.1.1 Fire Rock Conventional, Rumford and Linear Model Fireplace Series with Refractory Chimney: Fire Rock Conventional, Rumford and Linear fireplace and chimney systems are constructed using modular refractory masonry units designed for field assembly. The units consist of interlocking precast parts that are fitted together in the field using a premixed mortar called Fire Rock adhesive mortar, supplied with the units, to construct a wood-burning fireplace and chimney system. The parts are manufactured using a proprietary mixture of volcanic pumice aggregate and aluminate cement. High-temperature refractory bricks, a minimum of 1 1/4 inches (32 mm) thick, are provided to line the interior of the firebox. The fireplace and chimney systems are available in models and sizes noted in Table 1 and shown in Figures 1A, 1B and 2.

3.1.2 Fire Rock Outdoor Model Fireplace Series with Refractory Chimney: The Fire Rock Outdoor Model is recognized for outdoor use only. The fireplace and chimney systems are constructed using the same elements described in Section 3.1.1 above, and are available in models and sizes noted in Table 1 and shown in Figure 3.

3.1.3 Fire Rock Lite-Rock Fireplace Series with Factory-Built Chimney:

3.1.3.1 General: The Fire Rock Lite-Rock system consists of either the Fire Rock Conventional or the Rumford fireplaces described in Section 3.1.1 of this report, with a factory-built chimney as described in Section 3.1.3.2. All conditions of fireplace manufacture and installation noted in Sections 3.1.1 and 4.3 of this report apply, except as noted in Section 3.1.3.2. These fireplace and chimney systems are available in models and sizes noted in Table 1 and shown in Figure 4.

3.1.3.2 Factory-Built Chimney: The Lite Rock system uses a factory-built chimney acceptable to Fire Rock that is listed and labeled as complying with UL 103. The factory-built chimney must comply with Type HT requirements of UL 103 and be labeled "Type HT" and "Residential Type and Building Heating Appliance Chimney." Factory-built chimneys used with this system are limited to a maximum height of 66 feet (20 m) and a minimum height of 15 feet (4.6 m). Chimneys must be installed and terminated in accordance with the Fire Rock Products and chimney

manufacturer's installation instructions and under the terms of the manufacturer's listing for use with open-faced, masonry fireplaces. A minimum 2-inch (51 mm) clearance to combustibles must be maintained, or the minimum clearance to combustibles specified in the factory-built chimney manufacturer's installation instructions, whichever is greater.

3.2 Fire Rock Vent-Free Unvented Gas Appliance Enclosures:

Fire Rock Vent-Free models 30VF, 36VF, 42 VF and 48 VF are enclosures consisting of materials similar to those used for the Fire Rock solid-fuel burning fireplaces. The enclosures are recognized as complying with ANSI Z21.91 and are for use with unvented decorative gas logs listed and labeled as complying with ANSI Z21.11.2, and having a maximum heat input of 40,000 Btu/h (11 700 W). The gas logs must be factory-equipped with a listed oxygen-depletion safety shutoff system (ODS) and must comply with IFGC Section 621.

The base, sides, rear and top of the firebox consist of preformed refractory components that interlock together to form the unvented gas appliance enclosure. Installation of the enclosure is as described in Sections 4.3.1 and 4.3.4 of this report. The vent-free firebox dimensions are shown in Table 1 and Figure 6.

3.3 Fire Rock B-Vent Gas Appliance Fireplace Series:

3.3.1 General: The fireplace of this system is as described in Section 3.1.1, except that decorative gas logs listed in accordance with ANSI Z 21.60 are provided with the fireplace box for connection to a listed Type B gas vent as described in Section 3.3.2. These fireplace and Type B gas vent systems are available in models and sizes noted in Table 1 and shown in Figure 5.

3.3.2 Gas Vent: The Fire Rock B-Vent system uses any nominally 10-inch-diameter, listed Type B gas vent acceptable to Fire Rock and complying with Chapter 8 of the IMC and Chapter 5 of the IFGC, as specified in the Fire Rock B-Vent Gas Appliance System installation instructions.

3.4 Mortar:

Mortar used with the fireplace and chimney systems is Fire Rock Adhesive Mortar.

4.0 DESIGN AND INSTALLATION

4.1 General:

The fireplaces must be installed in accordance with this report, the manufacturer's instructions and the applicable code. A copy of the fireplace manufacturer's published installation instructions and, if applicable, the factory-built chimney or gas vent installation instructions, must be available at the jobsite at all times during installation. The fireplaces are not recognized for use with doors.

4.2 Design:

Installation is limited to Seismic Design Categories A and B, except that when installation is in accordance with Section 4.3 of this report, the Fire Rock Conventional Model 30, 36 and 42 fireplaces may be installed with factory-built chimneys in Seismic Design Categories C, D, E and F, provided the seismic design factors are limited to the values noted in Table 3. The seismic design must be in accordance with Sections 13.3, 13.4, 13.5 and 13.6 of ASCE 7. Fireplace systems used in Seismic Design Categories C, D, E, and F are limited to those incorporating listed and labeled factory-built chimneys as described in Section 3.1.3.2.

Structural design calculations and construction plans, prepared by a licensed design professional where required by the statutes of the jurisdiction in which the project is to be

constructed, are required to determine the requirements for the fireplace foundation and anchorage of the fireplace to the foundation.

When installation is on wood floor construction, the licensed design professional must determine the requirements for support and anchorage for the combined gravity and seismic loading. The applicability of the seismic design parameters noted in Table 3 must be verified with due consideration of the flexibility of anchorage and supports. In addition, the calculated long-term deflection of the wood members supporting the fireplace must not exceed the values shown in IBC Table 1604.3 for floor members. Under the IRC, an engineered design approach must be provided in accordance with Section R301.1.3.

4.3 Installation:

4.3.1 General: For all models except B-Vent, Lite Rock, and Vent-Free, a noncombustible foundation, adequate to support all required loads, is necessary and must be deemed adequate and in compliance by the code official. Fire Rock B-Vent models, Fire Rock Lite-Rock models and Fire Rock Vent-Free models may be supported by combustible materials. When the Fire Rock Conventional and Rumford fireplaces are installed on the 3-inch (76 mm) LiteRock Riser, the Fire Rock Conventional and Rumford fireplace models can be installed over a combustible floor. The Fire Rock 3-inch Lite Rock Riser is composed of two 1.5-inch thick boards of Skamotec 225 stacked on top of each other with dimensions to match fireplace base plate. Fire Rock Lite-Rock models may be erected on a noncombustible supporting system that raises the Fire Rock baseplate 8 inches (203 mm) above the combustible floor. Fire Rock B-Vent and Vent-Free models may be erected directly on the combustible floor. Each system must be installed in accordance with the published manual that is included with each kit (*Installation and Specification Manual*). Each of these manuals includes specific instructions as to the setting of the base, walls, smoke chamber and chimney. Fireplace units are assembled on the foundation by installing the base hearth plate, firebox wall sections, damper assembly and smoke chamber. The refractory components are joined together with the Fire Rock Adhesive Mortar supplied by Fire Rock Products, LLC. Fire Rock Adhesive Mortar is mixed with water until smooth and without dry spots, and is then poured into a mortar application bag and applied to the face of one adjoining component of each joint. The mortar is laid in a bead of at least 1 inch (25.4 mm) on each surface that comes in contact with another component surface. After setting of a component, the mortar must be able to be seen at the surface of the joint, and subsequently must be smoothed. If the mortar is not visible, the component must be removed and additional mortar applied. The mortar must not be applied at temperatures below 40°F (4.4°C). The firebox sidewalls, back wall, and hearth must be covered with a minimum 1¹/₄-inch-thick (32 mm) refractory brick that complies with ASTM Standard 1261, using the mortar supplied with the fireplace units. When installed in Seismic Design Categories C, D, E and F, the fireplaces must be installed with two 1¹/₂-inch-diameter (12.7 mm) steel threaded rods in each of the firebox sidewall cavities, and the cells must be grouted with minimum 2500 psi (17.2 MPa) concrete as recommended by Fire Rock Products, LLC. The threaded rods must be spaced 8 inches (203 mm) and have a length of 36 inches (914 mm). The threaded rods must be anchored to the foundation as determined in accordance with Section 4.2 of this report.

Combustion air must be provided in accordance with IBC Section 2111.14, IRC Section R1006.1, IRC Section G2407

or IFGC Section 304, as applicable, and the manufacturer's published installation instructions.

4.3.2 Clearance to Combustibles: See Table 2.

4.3.3 Refractory Chimney Systems: The refractory masonry chimney system is supported on the top of the smoke chamber. It is assembled by stacking the refractory chimney components and mortaring all joints. Fire Rock Adhesive Mortar is applied in all joints as described in Section 4.3.1 of this report. The chimney may be installed using Fire Rock Offset Blocks for the purposes of offsetting the flue from directly above the firebox. The Offset Blocks are made from the same material described in Section 3.1.1 of this report and are mortared together as described in Section 4.3.1. Chimneys may include offsets with a maximum horizontal distance of 40 inches (1016 mm). At a maximum, every fifth offset chimney block must be supported by noncombustible materials, such as a concrete block wall. Where required by the code official, details of the support wall construction must be provided.

The portion of the chimney exposed to the exterior must be covered with material such as brick veneer in accordance with the applicable code. A brick ledge chimney section may be used to support the brick veneer if the installed height of the brick veneer is less than 20 feet (6.1 m). Brick veneer must be anchored to the chimney in accordance with the 2018 IBC Section 1404.6 (2015, 2012 and 2009 IBC Section 1405.6 or 2006 IBC Section 1405.5), as applicable. Terminations must comply with IBC Section 2113.9 or IRC Section R1003.9, as applicable. Where required by the code official, an approved spark arrester complying with Section 2113.9.2 of the 2018 and 2015 and 2012 IBC, Section 2113.9.1 of the 2009 and 2006 IBC and Section R1003.9.2 of the 2018, 2015 and 2012 IRC, Section R1003.9.1 of the 2009 and 2006 IRC, as applicable, must be used. Chimney fireblocking complying with IBC Section 2113.20 and IRC Section R1003.19 must be used.

For installations with vertical chimneys, the chimney is installed with zero clearance to combustibles. When offset blocks are used, materials above the offset chimney must be installed with a minimum 1-inch (25.4 mm) clearance to combustibles.

4.3.4 Unvented Gas Appliance Enclosure Installation: The unvented gas appliance enclosure must be installed in accordance with IFGC Section 621, IRC Section G2445 and the manufacturer's published installation instructions. The enclosure must only be installed within a room that has another primary source of heat, and use of the units is prohibited in locations defined in IRC Section G2406.2 and IFGC Section 303.3. The unit must be anchored in accordance with IRC Section M1307.2 and IFGC Section 301.12. When installed as described in Section 4.3.1, the firebox enclosure may be installed on combustible construction and at zero clearance to combustible construction on sides, back and top. Minimum clearances from the firebox enclosure opening are 6 inches (152 mm) to sidewalls and 12 inches (305 mm) to combustible mantles having a minimum 8-inch (203 mm) depth.

4.3.5 Vented Gas Appliance Fireplaces and Type B-Vent Installation: The vented gas appliance fireplaces and Type B vents must be installed in accordance with IFGC Section 604, IRC Section G2434 and the manufacturer's published installation instructions. Fire Rock B-Vent installation includes additional components from Fire Rock fireplace units, including the following: Draft Diverter, Chimney Flap Safety Device, Safety Shut-off Switch, Draft Hood Connector, High Temperature Wiring Harness, and a chimney base with a 10-inch-diameter (254 mm) vent, as well as a specific gas log appliance sized to the firebox.

Each component must be installed as described in the *B-Vent Installation and Specification Manual* included with each B-Vent kit. The Fire Rock B-Vent model is then finished by adding sections of 10-inch-inside-diameter (254 mm) Type B venting to adequately clear the roof or chase structure in accordance with the vent manufacturer's instructions and the local code.

5.0 CONDITIONS OF USE

The Fire Rock modular refractory fireplace and chimney systems described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1** The fireplace assemblies must be installed in accordance with the manufacturer's published installation instructions, this report and the applicable code. In the event of a conflict between this report and the manufacturer's published installation instructions, this report governs.
- 5.2** Structural design and calculations, prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed, must be provided to the code official to justify the supporting structure for all applicable loads, including gravity, wind and earthquake loading, and applicable load combinations per IBC Section 1605.
- 5.3** The design of the anchorage of completed units on other than foundations on grade is beyond the scope of this report. Structural design and calculations from a registered design professional must be submitted to the code official for approval.
- 5.4** Installation of fireplace and chimney systems described in this report is limited to Seismic Design Categories A and B, except as described in Sections 4.2 and 4.3 of this report.
- 5.5** Combustion air must be provided as specified in Section 4.3.1 of this report.
- 5.6** Placement of Fire Rock Outdoor fireplace models on property must be subject to code official approval.
- 5.7** The fireplaces must not be installed with doors.
- 5.8** Compliance with the fireplace air leakage provisions found in 2018 and 2015 *International Energy Conservation Code® (IECC)* Section R402.4.2, 2012 IECC Section R402.4.2 and Table R402.4.1.1, 2009 IECC Section 402.4.3, 2018 and 2015 IRC Section N1102.4.2, 2012 IRC Section N1102.4.2 and Table N1102.4.1.1 and 2009 IRC Section N1102.4.3 are outside the scope of this report.
- 5.9** Under the 2018 IRC, 2018 IMC and 2018 IFGC, where factory-built chimneys pass through insulated assemblies, an insulation shield complying with 2018 IRC Section R1005.8, 2018 IMC Section 805.7 or 2018 IFGC Section 503.5.11, as applicable, must be installed.
- 5.10** The fireplace and refractory chimney products are manufactured at the Fire Rock Products facility located in Fairfield, Alabama, under a quality control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

- 6.1** Data in accordance with the ICC-ES Acceptance Criteria for Field-constructed Fireplace Systems Using Prefabricated Blocks (AC375), dated February 2012 (editorially revised August 2019).

6.2 Data in accordance with the ICC-ES Acceptance Criteria for Seismic Certification by Shake-Table Testing of Nonstructural Components (AC156), approved October 2010 (editorially revised September 2019).

7.0 IDENTIFICATION

7.1 The components of the fireplace and chimney are supplied to the jobsite on shrink-wrapped pallets bearing a label with the Fire Rock Products, LLC, name and address, the model number, and the evaluation report number (ESR-2599). A permanent label must be attached to the fireplace and to the vented or unvented enclosure, bearing the Fire Rock Products, LLC, name; product name; the serial number; the clearance to

combustibles; other information required by UL 127; the evaluation report number (ESR-2599).

7.2 The report holder's contact information is the following:

FIRE ROCK PRODUCTS LLC
1500 1st AVENUE N, SUITE 75
BIRMINGHAM, ALABAMA 35203
(205) 639-5000
www.firerock.us

TABLE 1—FIRE ROCK FIREPLACE DIMENSIONS

MODEL	OVERALL FIREBOX SIZE INCLUDING SMOKE CHAMBER (inches)			FIREBOX OPENING SIZE (inches) Width x Height ¹	CHIMNEY OR VENT SIZE—I.D. (inches)	APPROXIMATE WEIGHT (pounds)	INSTALLED HEIGHT—FIREPLACE AND CHIMNEY (feet)	
	Width	Depth	Height				Minimum	Maximum
Fire Rock Conventional ²								
30	38	28 ¹ / ₂	61	32 ¹ / ₂ x 34 ¹ / ₂	15	1800	15	65
36	44	28 ¹ / ₂	70 ¹ / ₂	38 ¹ / ₂ x 34 ¹ / ₂	15	2150	15	65
42	50	28 ¹ / ₂	70 ¹ / ₂	44 ¹ / ₂ x 34 ¹ / ₂	15	2410	15	65
48	56	28 ¹ / ₂	80	50 ¹ / ₂ x 34 ¹ / ₂	15	2900	15	66
Fire Rock B-Vent ⁴								
30	38	28 ¹ / ₂	61	32 ¹ / ₂ x 34 ¹ / ₂	10	1800	19	65
36	44	28 ¹ / ₂	70 ¹ / ₂	38 ¹ / ₂ x 34 ¹ / ₂	10	2150	19	65
42	50	28 ¹ / ₂	70 ¹ / ₂	44 ¹ / ₂ x 34 ¹ / ₂	10	2410	19	65
48	56	28 ¹ / ₂	80	50 ¹ / ₂ x 34 ¹ / ₂	10	2900	19	66
Fire Rock Lite-Rock ³								
30	38	28 ¹ / ₂	61	32 ¹ / ₂ x 34 ¹ / ₂	14	1800	15	65
36	44	28 ¹ / ₂	70 ¹ / ₂	38 ¹ / ₂ x 34 ¹ / ₂	14	2150	15	65
42	50	28 ¹ / ₂	70 ¹ / ₂	44 ¹ / ₂ x 34 ¹ / ₂	14	2410	15	66
48	56	28 ¹ / ₂	80	50 ¹ / ₂ x 34 ¹ / ₂	14	2900	15	66
Fire Rock Vent-Free								
30 VF	38	28 ¹ / ₂	41 ¹ / ₂	32 ¹ / ₂ x 33	N/A	1350	N/A	N/A
36 VF	44	28 ¹ / ₂		38 ¹ / ₂ x 33		1500		
42 VF	50	28 ¹ / ₂		44 ¹ / ₂ x 33		1650		
48 VF	56	28 ¹ / ₂		50 ¹ / ₂ x 33		1800		
Fire Rock Outdoor ²								
30	38	28 ¹ / ₂	52	32 ¹ / ₂ x 25 ⁷ / ₈	15	2000	6.33	16.33
36	44	28 ¹ / ₂	61	38 ¹ / ₂ x 34 ¹ / ₂	15	2200	7.25	17.25
42	50	28 ¹ / ₂	70	44 ¹ / ₂ x 34 ¹ / ₂	15	2800	8.83	17.83
Fire Rock Rumford ²								
30	38	28 ¹ / ₂	61	32 ¹ / ₂ x 34 ¹ / ₂	15	1800	19	65
36	44	28 ¹ / ₂	77 ⁵ / ₈	38 ¹ / ₂ x 42	15	2350	19	65
42	50	28 ¹ / ₂	77 ⁵ / ₈	44 ¹ / ₂ x 42	15	2650	19	65
48	56	28 ¹ / ₂	97 ¹ / ₄	50 ¹ / ₂ x 50 ¹ / ₂	15	3400	19	65
Fire Rock Linear								
60	68	28 ¹ / ₂	60 ³ / ₈	62 ¹ / ₂ x 25 ¹ / ₈	2- 15 ⁵	2665	15	65
72	80	28 ¹ / ₂	60 ³ / ₈	74 ¹ / ₂ x 25 ¹ / ₈	2- 15 ⁵	2825	15	65

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

¹Dimensions do not include firebrick lining.

²Chimney diameter dimensions are for refractory masonry chimney.

³Chimney diameter dimensions for UL 103 listed metal chimney.

⁴Chimney diameter dimensions for Type B gas vent.

⁵Two refractory chimneys having 15-inch I.D. must be used. As an alternative to two refractory chimneys, two 14-inch diameter UL 103 listed factory-built chimneys as described in Section 3.1.3.2 must be used.

TABLE 2—FIRE ROCK MINIMUM CLEARANCE TO COMBUSTIBLES

MODEL	OPENING TO SIDEWALL (inches)	OPENING TO COMBUSTIBLE TRIM (inches)	OPENING TO MANTLE WITH 8" DEPTH (inches)	NONCOMBUSTIBLE HEARTH EXTENSION (inches)	FIREBOX & SMOKE CHAMBER TO COMBUSTIBLES OR FRAMING (inches)	SMOKE CHAMBER TO FRONT WALL & SMOKE CHAMBER TOP TO WOOD FRAMING (inches)
Fire Rock Conventional 30, 36, 42, 48	28	12	16	24 in front, 8 each side of opening	1	1
Fire Rock B-Vent 30, 36, 42, 48	28	12	16	20 in front, 8 each side of opening	1	1
Fire Rock Lite-Rock 30, 36, 42, 48	28	12	16	24 in front, 8 each side of opening	1	1
Fire Rock Vent-Free 30, 36, 42, 48	6	12	12	20 in front, 8 each side of opening	0	0
Fire Rock Outdoor 30, 36, 42	28	12	16	24 in front, 8 each side of opening	1	1
Fire Rock Rumford 30, 36, 42, 48	28	12	22	24 in front, 8 each side of opening	1	1
Fire Rock Linear 60 and 72	32	12	16	32 in flush hearth or 20 in. raised hearth (min. 12 inch raised) hearth in front; 8 in. each side of opening	1	1

For SI: 1 inch = 25.4 mm 1 foot = 304.8 mm.

TABLE 3—SEISMIC DESIGN PARAMETERS FOR FIRE ROCK CONVENTIONAL 30, 36, AND 42 MODELS

PARAMETER	VALUE
Amplification factor, a_p	1.0
Component response modification factor, R_p	1.5
z/h factor, where z is the height in structure of point of attachment with respect to the base (0 feet); and h is the average roof height of structure with respect to the base (10 feet)	0
Fundamental period of the fireplace, seconds	0.18
Maximum spectral response acceleration parameter, S_{Ds}	1.22

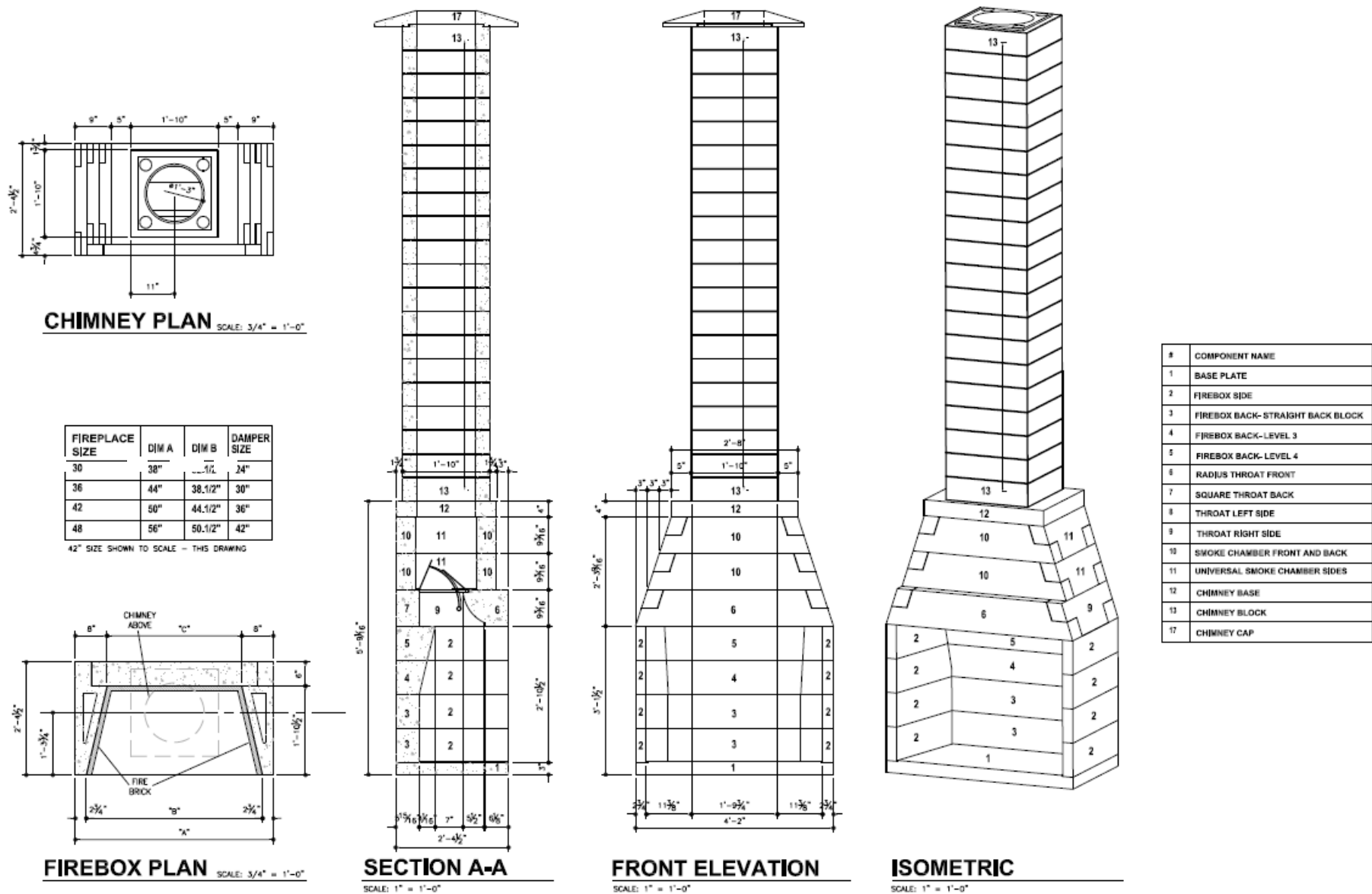
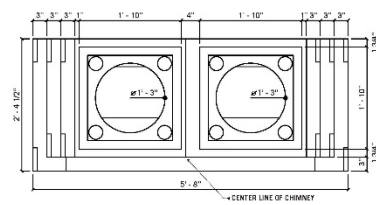


FIGURE 1A—CONVENTIONAL FIREPLACE AND REFRACTORY CHIMNEY SYSTEM (SEE TABLE 1 FOR MODEL DIMENSIONS)

#	COMPONENT NAME
1	BASE PLATE
2	FIREBOX SIDE
3	FIREBOX BACK-STRAIGHT BACK BLOCK
6	RADIUS THROAT FRONT
7	SQUARE THROAT BACK
8	THROAT LEFT SIDE
9	THROAT RIGHT SIDE
10	SMOKE CHAMBER FRONT AND BACK
11	UNIVERSAL SMOKE CHAMBER SIDES
12	CHIMNEY BASE
13	CHIMNEY BLOCK

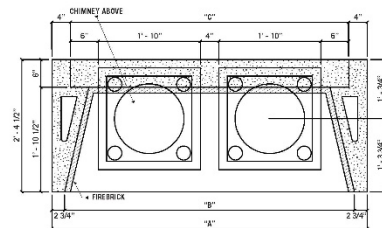


CHIMNEY PLAN

SCALE: 1" = 1'-0"

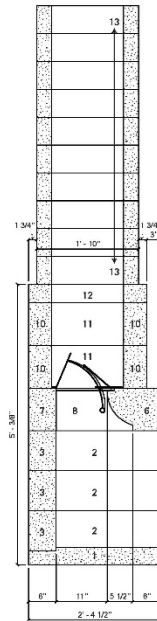
FIREPLACE SIZE	DIM A	DIM B	DAMPER SIZE
60	68"	62.5"	54"
72	80"	74.5"	N/A

60' SIZE SHOWN TO SCALE - THIS DRAWING



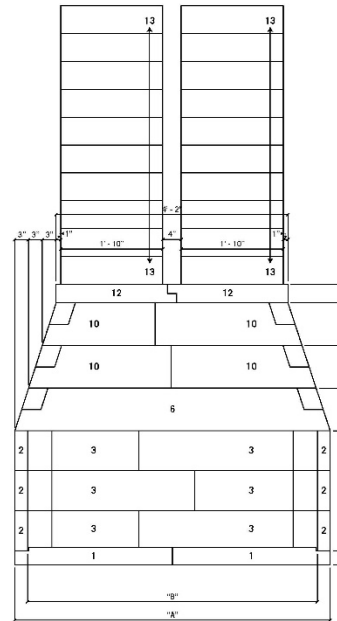
FIREBOX PLAN

SCALE: 1" = 1'-0"



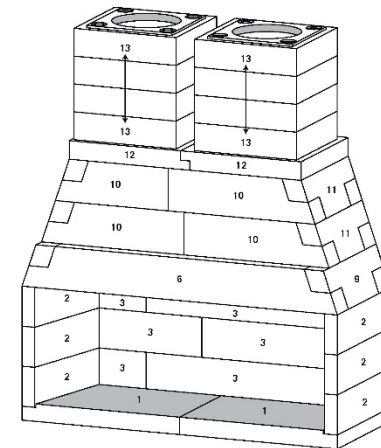
SECTION A-A

SCALE: 1" = 1'-0"



FRONT ELEVATION

SCALE: 1" = 1'-0"



ISOMETRIC

SCALE: 1" = 1'-0"

LINEAR RISER SYSTEM
60

RELEASE DATE: 2/20/2020
SCALE: 1" = 1'-0"
MODEL
FRK-LINEAR-60
SHEET
1 OF 1

FIGURE 1B—FIREROCK LINEAR 60 AND 72 FIREPLACE MODELS

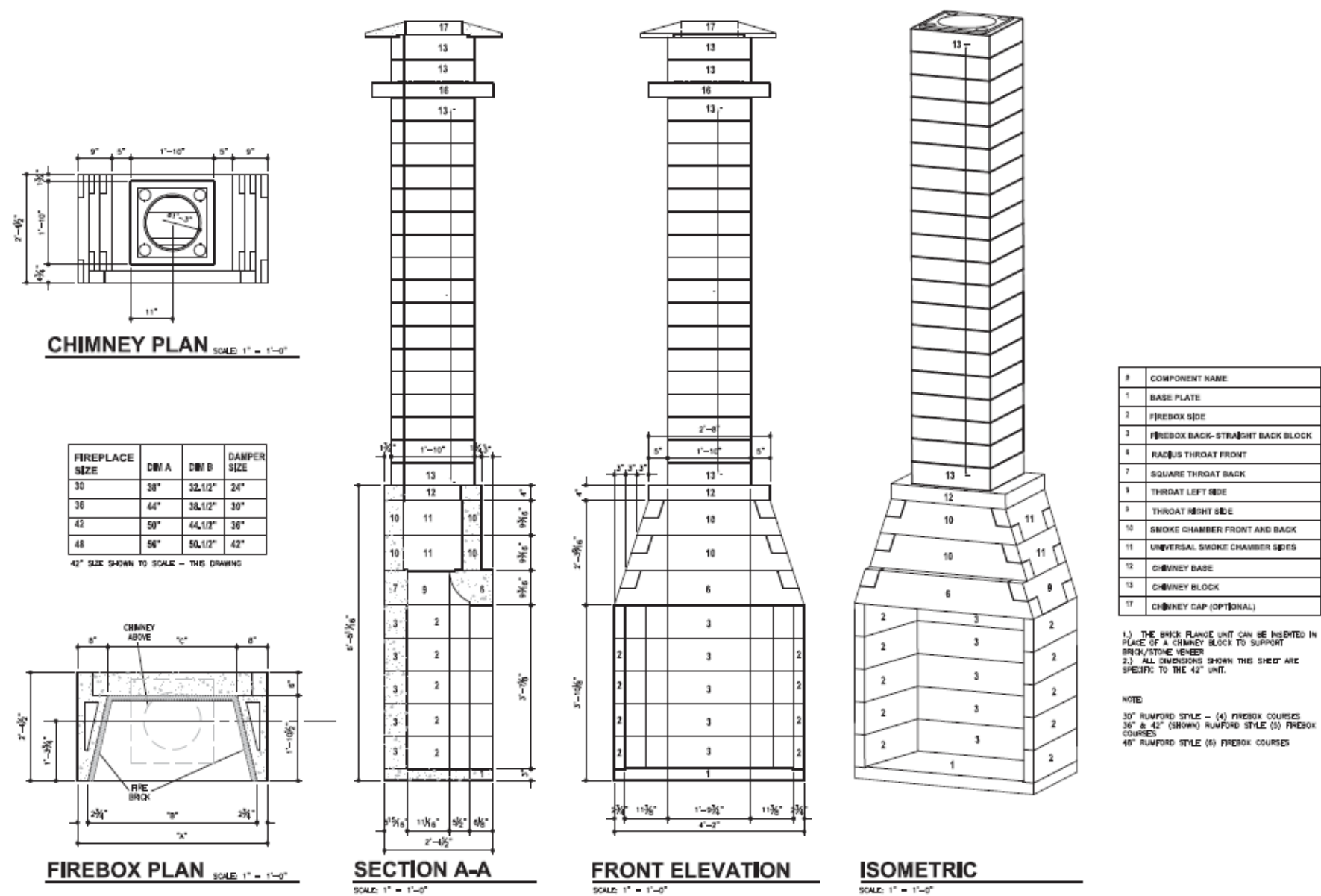


FIGURE 2—RUMFORD FIREPLACE AND REFRACTORY CHIMNEY SYSTEM (SEE TABLE 1 FOR MODEL DIMENSIONS)

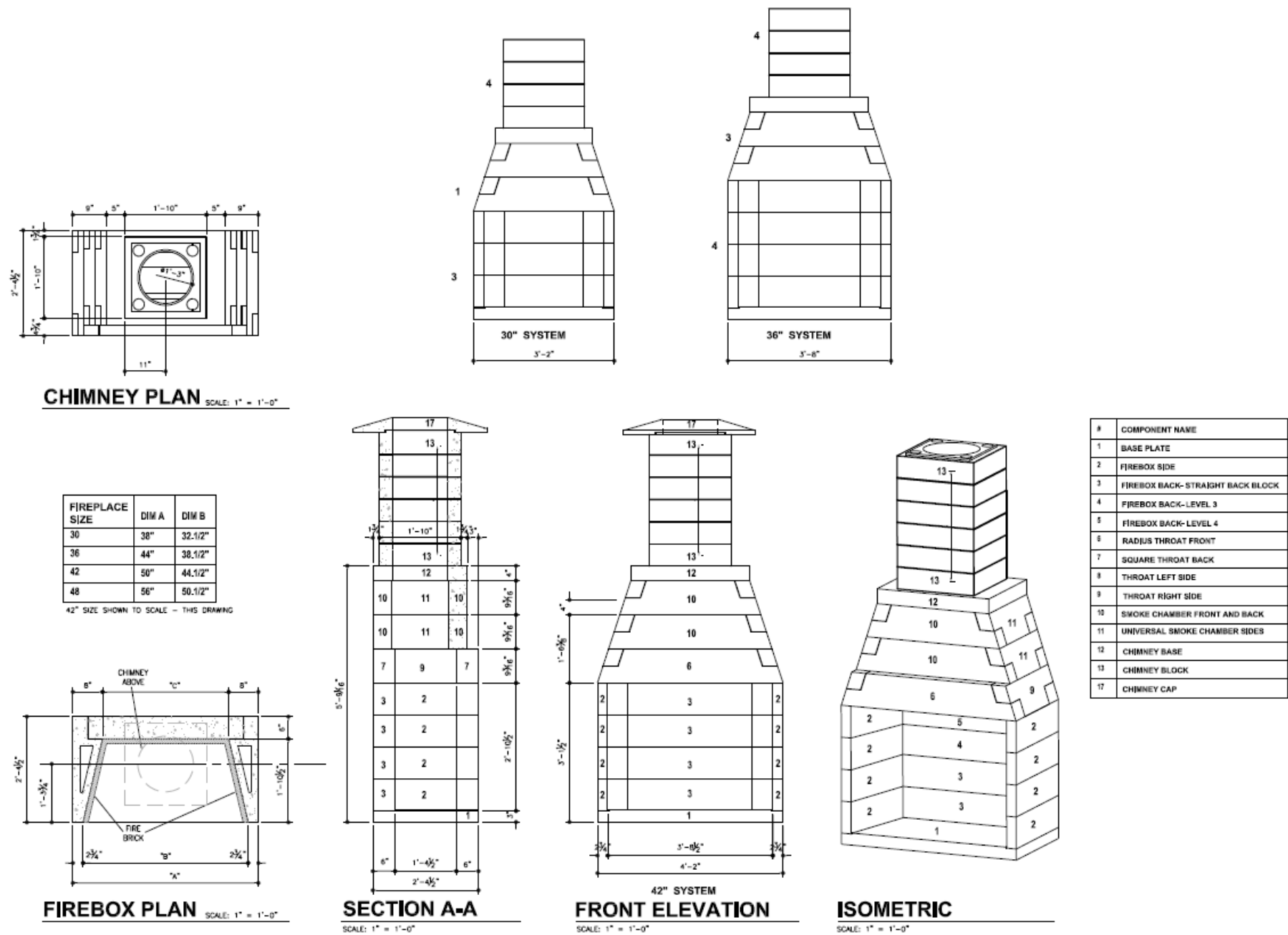
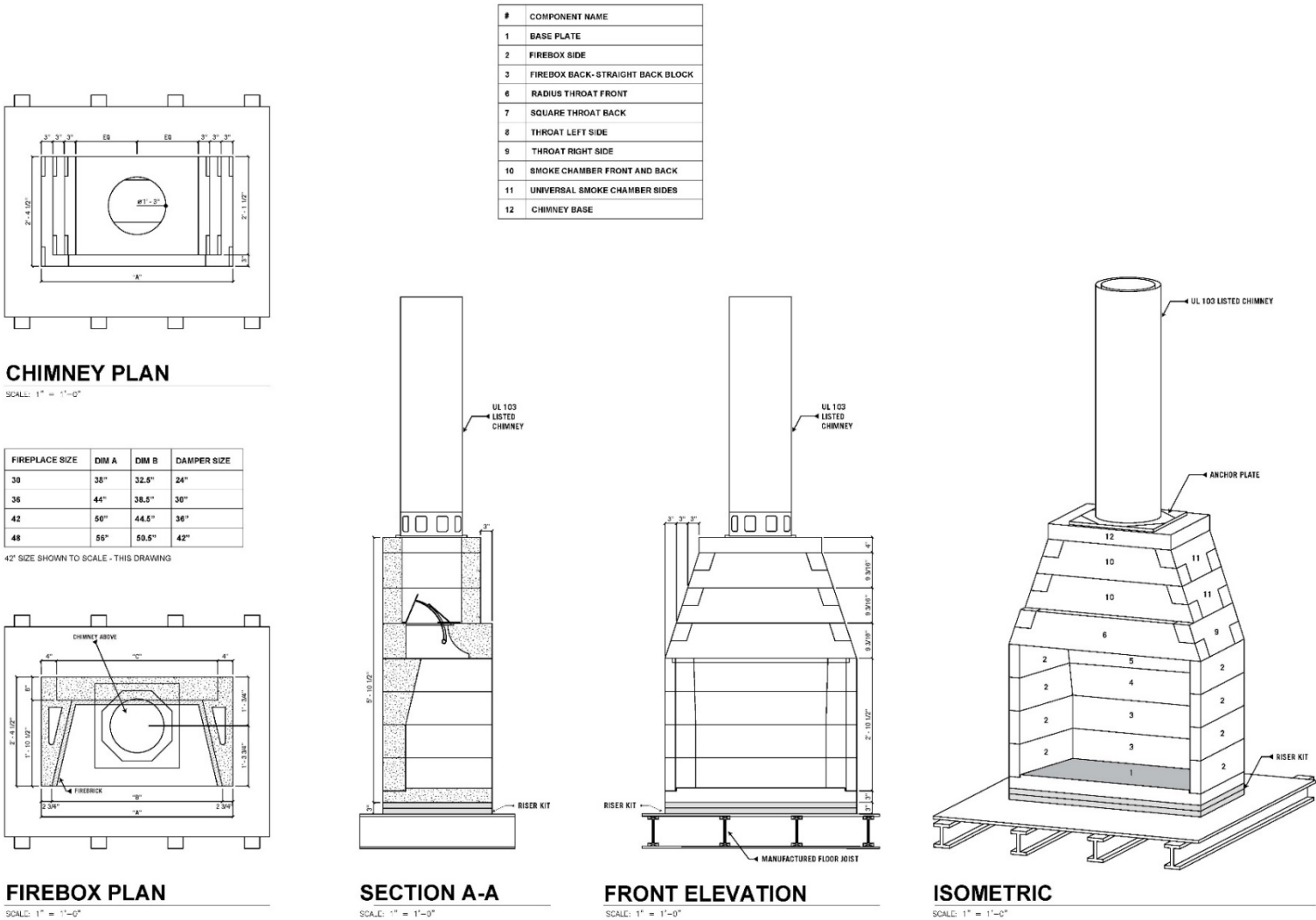


FIGURE 3—FIREROCK OUTDOOR FIREPLACE AND REFRACTORY CHIMNEY SYSTEM (SEE TABLE 1 FOR MODEL DIMENSIONS)



LITEROCK RISER SYSTEM
42

RELEASE DATE: 2/20/2020
SCALE: 1" = 1'-0"
MODEL:
FRK-LR-42
SHEET
1 OF 1

FIGURE 4—LITE ROCK FIREPLACE AND FACTORY-BUILT CHIMNEY SYSTEM (SEE TABLE 1 FOR MODEL DIMENSIONS)

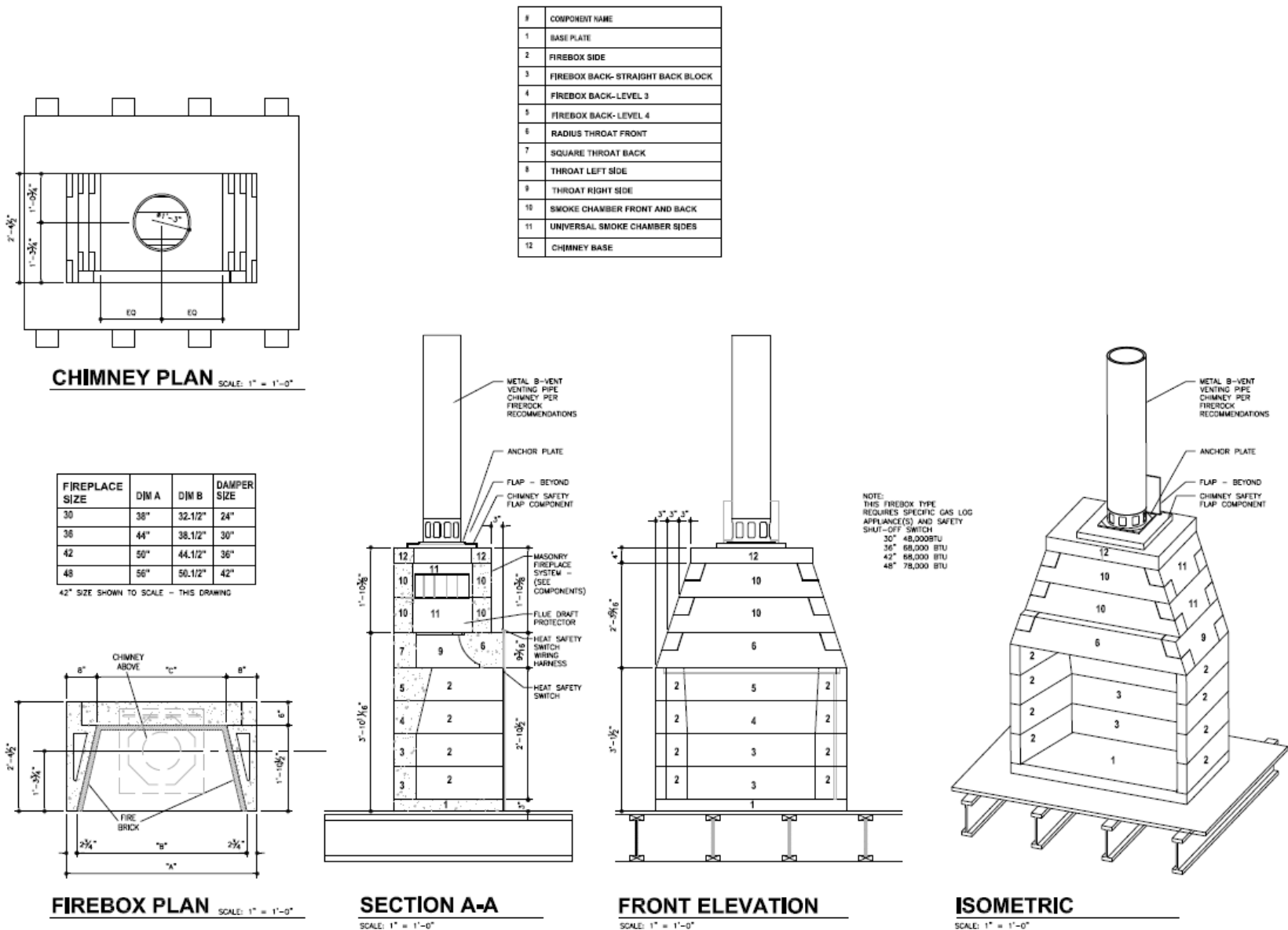
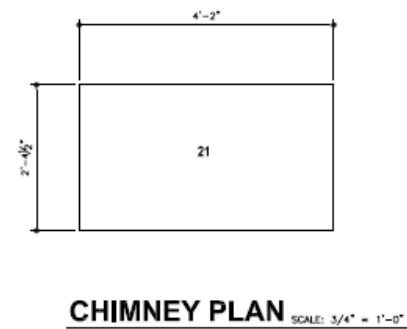


FIGURE 5—B-VENT FIREPLACE AND TYPE B GAS VENT SYSTEM (SEE TABLE 1 FOR MODEL DIMENSIONS)



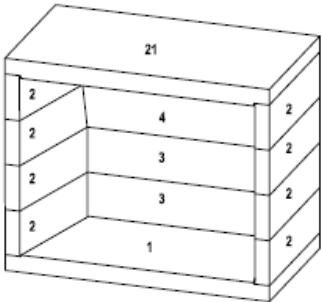
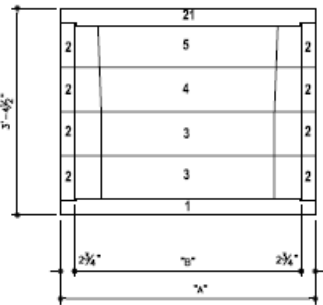
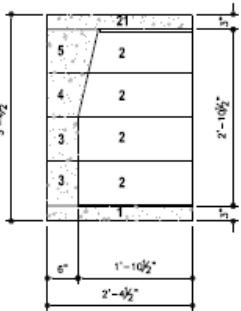
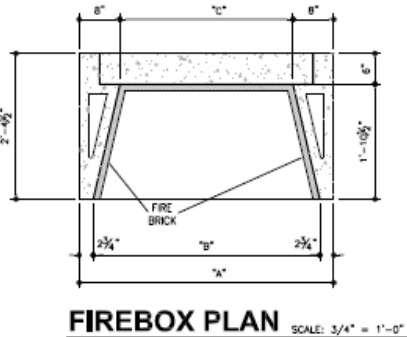
FIREPLACE SIZE	DIM A
30	38"
36	44"
42	50"
48	56"

42" SIZE SHOWN TO SCALE - THIS DRAWING

#	COMPONENT NAME
1	BASE PLATE
2	FIREBOX SIDE
3	FIREBOX BACK- STRAIGHT BACK BLOCK
4	FIREBOX BACK- LEVEL 3
5	FIREBOX BACK- LEVEL 4
21	TOP PLATE

1.) ALL DIMENSIONS SHOWN THIS SHEET ARE SPECIFIC TO THE 42" UNIT.

NOTE:
THIS SYSTEM REQUIRES MAXIMUM 40,000 BTU VENT-FREE GAS LOG APPLIANCE



ISOMETRIC
SCALE: 3/4" = 1'-0"

FIGURE 6—VENT-FREE FIREPLACE FIREBOX (SEE TABLE 1 FOR MODEL DIMENSIONS)

DIVISION: 10 00 00—SPECIALTIES**Section: 10 31 00—Manufactured Fireplaces****REPORT HOLDER:****FIRE ROCK PRODUCTS LLC****EVALUATION SUBJECT:**

FIRE ROCK CONVENTIONAL FIREPLACE SERIES MODELS 30, 36, 42, AND 48 WITH FACTORY-BUILT CHIMNEY SYSTEMS; FIRE ROCK B-VENT FIREPLACE SERIES MODELS 30, 36, 42, AND 48; FIRE ROCK LITE-ROCK FIREPLACE SERIES MODELS 30, 36, 42 AND 48 WITH FACTORY-BUILT CHIMNEY SYSTEMS; AND FIRE ROCK VENT FREE FIREPLACE SERIES MODELS 30VF, 36VF, 42VF AND 48VF

1.0 REPORT PURPOSE AND SCOPE**Purpose:**

The purpose of this evaluation report supplement is to indicate that Fire Rock Conventional Fireplace Series Models 30, 36, 42, and 48 with Factory-built Chimney Systems; Fire Rock B-Vent Fireplace Series Models 30, 36, 42, and 48; Fire Rock Lite-Rock Fireplace Series Models 30, 36, 42 and 48 with Factory-Built Chimney Systems; and Fire Rock Vent Free Fireplace Series Models 30VF, 36VF, 42VF and 48VF, described in ICC-ES evaluation report ESR-2599, have also been evaluated for compliance with the code(s) noted below.

Applicable code edition(s):

- 2019 *California Building Code* (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) and Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

- 2019 *California Residential Code* (CRC)
- 2019 *California Energy Code* (CEC)

2.0 CONCLUSIONS**2.1 CBC:**

The Fire Rock Conventional Fireplace Series Models 30, 36, 42, and 48 with Factory-built Chimney Systems; Fire Rock B-Vent Fireplace Series Models 30, 36, 42, and 48; Fire Rock Lite-Rock Fireplace Series Models 30, 36, 42 and 48 with Factory-Built Chimney Systems; and Fire Rock Vent Free Fireplace Series Models 30VF, 36VF, 42VF and 48VF, described in Sections 2.0 through 7.0 of the evaluation report ESR-2599, comply with CBC Chapters 13 and 28, provided the design and installation are in accordance with the 2018 *International Building Code*® (IBC) provisions noted in the evaluation report and the additional requirements of CBC Chapters 13 and 28, as applicable.

2.1.1 OSHPD:

The applicable OSHPD Sections and Chapters of the CBC are beyond the scope of this supplement.

2.1.2 DSA:

The applicable DSA Sections and Chapters of the CBC are beyond the scope of this supplement.

2.2 CRC:

The Fire Rock Conventional Fireplace Series Models 30, 36, 42, and 48 with Factory-built Chimney Systems; Fire Rock B-Vent Fireplace Series Models 30, 36, 42, and 48; Fire Rock Lite-Rock Fireplace Series Models 30, 36, 42 and 48 with Factory-Built Chimney Systems; and Fire Rock Vent Free Fireplace Series Models 30VF, 36VF, 42VF and 48VF, described in

Sections 2.0 through 7.0 of the evaluation report ESR-2599, comply with the CRC, provided the design and installation are in accordance with the 2018 *International Residential Code*® (IRC) provisions noted in the evaluation report and the additional requirements of CRC Parts IV, V and VI, as applicable.

2.3 CEC:

The Fire Rock Conventional Fireplace Series Models 30, 36, 42, and 48 with Factory-built Chimney Systems; Fire Rock B-Vent Fireplace Series Models 30, 36, 42, and 48; Fire Rock Lite-Rock Fireplace Series Models 30, 36, 42 and 48 with Factory-Built Chimney Systems; and Fire Rock Vent Free Fireplace Series Models 30VF, 36VF, 42VF and 48VF, described in Sections 2.0 through 7.0 of the evaluation report ESR-2316, comply with the CEC, provided the design and installation are in accordance with the evaluation report ESR-2599 and the additional requirements of CEC Sections 110.1 and 110.5, as applicable.

3.0 CONDITIONS OF USE

The Fire Rock wood-fired fireplaces with factory-built chimney systems, gas-fired fireplaces with Type B vents and gas-fired vent free (unvented) fireplaces described in this evaluation report supplement must comply with all of the following conditions:

- All applicable sections in the evaluation report ESR-2599.
- The design, installation and inspection are in accordance with additional requirements of CBC Chapters 16 and 17, as applicable.
- The Fire Rock wood-fired fireplaces with factory-built chimney systems are approved for use with solid wood logs.
- The installation of Fire Rock fireplaces is limited to base floor and seismic parameters noted in Table 3 of the evaluation report ESR-2599.
- When required by the California Energy Code (CEC), the combustible air intake must be as specified in the evaluation report ESR-2599.
- The exterior air supply system to the fireplaces must comply with the requirements noted in 2019 CBC Section 2111.14.1 or 2019 CRC Section R1006, as applicable.
- The Fire Rock wood-fired fireplaces with factory-built chimney systems, gas-fired fireplaces with Type B vents and gas-fired vent free (unvented) fireplaces must be installed in accordance with the manufacturer's published installation instructions, the 2019 CBC or 2019 CRC, and the evaluation report ESR-2599. A copy of the manufacturer's published installation instructions must be available at the jobsite.

This supplement expires concurrently with the evaluation report, reissued April 2022.